

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method of managing events in a standard computer system comprising a central unit ~~(10)~~ connected to memory units ~~(20)~~—and peripheral devices ~~(30, 40)~~ by a data bus ~~(50)~~—allowing a multimaster configuration, the method comprising the following steps:

- receiving events,
- time-stamping and storing the events,
- assigning at least one appropriate action to each received event, and
- executing that action in response to the received event, which method is characterized in that the above-mentioned management steps are carried out in real time without access to the central unit ~~(10)~~—by a management unit ~~(70)~~—included in an independent management module ~~(60)~~—connected to the data bus ~~(50)~~—and incorporated into the standard computer system.

2. (CURRENTLY AMENDED) A management method according to claim 1, characterized in that each event received is stored in a first memory ~~(73)~~—associated with the management unit—~~(70)~~.

3. (CURRENTLY AMENDED) A management method according to either claim 1—or claim 2, characterized in that the timescale of real-time management is of the order of one microsecond.

4. (CURRENTLY AMENDED) A management method according to any one of claims 1—to 3, characterized in that the independent management module ~~(60)~~—is isolated from the central unit ~~(10)~~—by

a bridge—(57).

5. (CURRENTLY AMENDED) A management method according to any one of claims 1-to-4, characterized in that said action is read in a table of actions associated with the management unit (70) and is preprogrammed via the data bus—(50).

6. (CURRENTLY AMENDED) A management method according to any one of claims 1-to-5, characterized in that events received by the management unit (70)—are time-stamped to an accuracy of the order of 100 nanoseconds and stored in a second memory (74) associated with the management unit (70)—so that these events may be read via the data bus (50)—in order to store and monitor these events.

7. (CURRENTLY AMENDED) A management method according to any one of claims 1-to-6, characterized in that events received by the management unit (70)—are generated by a clock register (64, 65)—internal to the management module—(60).

8. (CURRENTLY AMENDED) A management method according to any one of claims 1-to-6, characterized in that events received by the management unit (70)—come from a unit (89)—adjacent the management module—(60).

9. (CURRENTLY AMENDED) A management method according to any one of claims 1-to-6, characterized in that events received by the management unit (70)—come from an equipment (87)—external to the computer system.

10. (CURRENTLY AMENDED) A management method according to either claim 8 or claim 9, characterized in that events received by the management unit (70) are synchronized to a frequency corresponding to that of a clock internal to the computer system.

11. (CURRENTLY AMENDED) A management method according to any one of claims 1 to 9, characterized in that events received from the external equipment (87) are filtered to eliminate interference.

12. (CURRENTLY AMENDED) A management method according to any one of claims 1 to 11, characterized in that the management unit (70) generates an interrupt if it is not possible to associate an event with an action.

13. (CURRENTLY AMENDED) Event management module incorporated into a standard computer system comprising a central unit (10) connected to memory units (20) and peripheral devices (30, 40) by a data bus (50) allowing a multimaster configuration, which module is characterized in that it comprises:

- an independent management unit (70) connected to the central unit (10) via an interface (63) and the data bus (50), said management unit (70) being adapted to receive and process events in real time without intervention by the central unit (10),

- a time-stamping clock (71) adapted to time-stamp these events before storing them in a first memory (73) internal to the management unit (70), and

- a random-access memory (61) containing a preprogrammed

table of actions, associated with the management unit ~~(70)~~—and adapted to assign appropriate actions to events received thereby.

14. (CURRENTLY AMENDED) A management module according to claim 13, characterized in that the data bus ~~(50)~~—is a standard bus selected from the group comprising a PCI bus, a VME bus, a compact PCI bus and a USB bus.

15. (CURRENTLY AMENDED) A management module according to either ~~claim 13 or claim 14~~, characterized in that it further comprises a second memory ~~(74)~~—internal to the management unit ~~(70)~~—for storing events in order to read them via the data bus ~~(50)~~.

16. (CURRENTLY AMENDED) A management module according to any one of claims 13—~~to 15~~, characterized in that the first memory ~~(73)~~—and the second memory ~~(74)~~—are of the FIFO type.

17. (CURRENTLY AMENDED) A management module according to claim 13, characterized in that the random-access memory ~~(61)~~—containing the table of actions is a double-port RAM.

18. (NEW) A management method according to claim 2, characterized in that:

the timescale of real-time management is of the order of one microsecond;

the independent management module is isolated from the central unit by a bridge;

said action is read in a table of actions associated with

the management unit and is preprogrammed via the data bus; events received by the management unit are time-stamped to an accuracy of the order of 100 nanoseconds and stored in a second memory associated with the management unit so that these events may be read via the data bus in order to store and monitor these events.

19. (NEW) A management method according to claim 18, characterized in that events received by the management unit are generated by a clock register internal to the management module.

20. (NEW) A management method according to claim 18, characterized in that events received by the management unit come from a unit adjacent the management module.

21. (NEW) A management method according to claim 18, characterized in that events received by the management unit come from an equipment external to the computer system.

22. (NEW) A management method according to claim 20, characterized in that events received by the management unit are synchronized to a frequency corresponding to that of a clock internal to the computer system.

23. (NEW) A management method according to claim 21, characterized in that events received by the management unit are synchronized to a frequency corresponding to that of a clock internal to the computer system.

24. (NEW) A management method according to claim 21,

characterized in that:

events received from the external equipment are filtered to eliminate interference;

the management unit generates an interrupt if it is not possible to associate an event with an action.

25. (NEW) A management module according to claim 14, characterized in that:

it further comprises a second memory internal to the management unit for storing events in order to read them via the data bus;

the first memory and the second memory are of the FIFO type.